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5 available in the art, including, for example, fluorophores, enzyme conjugates, radioisotopes, or any detectable label.

In one aspect, assays of the present invention include contacting a BMP-1 related protein or fragments or subunits thereof with the candidate agent, detecting a level of BMP-1 related protein activity or expression, and comparing that level of activity or expression to a standard level obtained by methods known in the art. These methods could involve, for example, BMP-1 related proteins affixed to solid supports, cell-free preparations, or natural or synthetic product mixtures. Assays, such as ELISAs, can be designed in which antibodies, monoclonal or polyclonal, bind directly or indirectly to a BMP-1 related protein or compete with BMP-1 related protein for binding.

The screening methods of the present invention can be used to identify agents that can be used in methods for treating the previously described BMP-1 related protein-associated diseases, disorders, and conditions. Agents identified using the present methods can be administered to produce the desired effect, such inhibiting BMP-1 related protein activity, such as the processing and cleavage of laminin 5 in a subject. Additionally, the present invention provides methods for the identification of agents which may decrease BMP-1 related protein activity in specific cells or tissues as desired under certain conditions.

In order to identify agents for use in treating or preventing a BMP-1 related protein-associated disorder by modulating the activity and expression of a BMP-1 related protein, BMP-1 related proteins, laminin 5, laminin 5 chains, or fragments or subunits thereof, can be used for screening therapeutic agents in any of a variety of screening techniques. Fragments employed in such screening tests may be free in solution, affixed to a solid support, borne on a cell surface, or located intracellularly. The blocking or reduction of biological